

Title (en)

MEMBER BONDING METHOD AND BONDED BODY

Title (de)

ELEMENTEBINDEVERFAHREN UND GEBUNDENER KÖRPER

Title (fr)

PROCÉDÉ DE LIAISON D'ÉLÉMENT ET CORPS LIÉ

Publication

EP 3646963 A4 20210324 (EN)

Application

EP 18823560 A 20180529

Priority

- JP 2017124725 A 20170627
- JP 2018003044 A 20180112
- JP 2018020543 W 20180529

Abstract (en)

[origin: EP3646963A1] In a method for joining members, a first tube 10, and a second tube 20 capable of being inserted into the first tube 10 are prepared. The second tube is inserted in a tube hole of the first tube in an axial direction of the first tube 10. The second tube 20 is radially expanded toward the first tube 10 so that the first tube 10 and the second tube 20 are joined by press-fitting. The first tube 10 is made of a material having a spring back amount larger than a spring back amount of the second tube 20.

IPC 8 full level

B21D 39/04 (2006.01); **B21D 39/20** (2006.01)

CPC (source: EP US)

B21D 39/04 (2013.01 - EP); **B21D 39/048** (2013.01 - US); **B21D 39/06** (2013.01 - EP); **B21D 39/20** (2013.01 - US); **B21D 39/206** (2013.01 - EP); **F16L 13/147** (2013.01 - US); **F16L 2013/145** (2013.01 - US)

Citation (search report)

- [X1] WO 2004103603 A1 20041202 - CLADTEK INTERNAT PTY LTD [AU], et al
- [X1] US 4688319 A 19870825 - GROSS HEINZ [DE], et al
- [X1] WO 2015189187 A1 20151217 - EISENBAU KRÄMER GMBH [DE]
- See also references of WO 2019003764A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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EP 3646963 A1 20200506; **EP 3646963 A4 20210324**; JP 2019005807 A 20190117; JP 7118645 B2 20220816; US 2020180007 A1 20200611

DOCDB simple family (application)

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